

Abstract

A fuel injector (1) for an internal combustion engine, with an injector body (2), which has at least one first injection orifice (3) and at least one second injection orifice (4), having a first nozzle needle (7), which is embodied as a hollow needle, is guided in a first needle guide (6) of the injector body (2), and controls the injection of fuel through the at least one first injection orifice (3), and having a second nozzle needle (9), which is disposed coaxial to the first nozzle needle (7) and controls the injection of fuel through the at least one second injection orifice (4).

To simplify the triggering of the second nozzle needle (9), the first nozzle needle (7) is provided with a first catch contour (19), which, once the first nozzle needle (7) opens a predetermined preliminary stroke (24), cooperates with a second catch contour (20) embodied on the second nozzle needle (9), and when the opening movement of the first nozzle needle (7) exceeds the preliminary stroke (24), carries the second nozzle needle (9) along with it.

(Fig. 1)